

Curriculum Vitae

Christopher G. Elles

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Education:

Ph.D., Chemistry, University of Wisconsin–Madison, July 2004
B.S., Chemistry, Colorado State University, *Cum Laude*, May 1999

Research Experience:

Postdoctoral Research Associate, 2004-present
University of Southern California, *Advisor*: Stephen E. Bradforth
and Argonne National Laboratory, *Advisor*: Robert A. Crowell

Graduate Research Assistant, 1999-2004
University of Wisconsin–Madison, *Advisor*: F. Fleming Crim
Thesis: Vibrational Relaxation and Photodissociation Dynamics in Solution

Undergraduate Research Assistant, 1998-1999
Colorado State University, *Advisor*: Nancy E. Levinger

Honors and Awards:

Physical Chemistry Division Excellence in Research Award, University of Wisconsin, 2004
McElvain Fellowship, University of Wisconsin, 1999-2000
Colorado State University Distinguished Scholars Award and Scholarship, 1995-1999
Colorado State University President's Scholarship, 1996-1999
College of Natural Sciences Alumni Merit Scholarship, Colorado State University, 1998-1999
Dr. Harry Puleston Memorial Scholarship, Colorado State University, 1998-1999
Undergraduate Research Award, Colorado State University, 1999
Undergraduate Service Award, Colorado State University, 1999
Sigma Xi Grant-in-Aid of Research, 1998
American Chemical Society Undergraduate Award in Analytical Chemistry, 1998
Reuben G. Gustavson Award, Colorado State University, 1997, 1998
CRC Press Freshman Chemistry Achievement Award, 1996

Activities and Affiliations:

American Association for the Advancement of Science, 2004-present
American Chemical Society, 1998-present
Graduate Student-Faculty Liaison Committee, University of Wisconsin, 2002-2004
Chemistry Curriculum and Undergraduate Studies Committee, 1998-1999
Undergraduate Chemical Society, 1997-1999 (Co-President 1998-1999)
Golden Key Honor Society, 1999
Phi Kappa Phi Honor Society, 1998

Publications:

9. C. G. Elles, A. E. Jailaubekov, R. A. Crowell, and S. E. Bradforth, *Excitation-energy dependence of the mechanism for two-photon ionization of liquid H₂O and D₂O from 8.3 to 12.4 eV*, (submitted).
8. C. G. Elles and F. F. Crim, *Connecting chemical dynamics in gases and liquids*, Annual Review of Physical Chemistry, **57**, 273 (2006).
7. D. A. Oulianov, O. J. Korovyanko, R. A. Crowell, D. J. Gosztola, I. A. Shkrob, R. C. Rey-de-Castro, and C. G. Elles, *Sub-picosecond radiolysis by means of a terawatt laser wakefield accelerator*, Proceedings of SPIE, **6101**, 610126 (2006)
6. O. J. Korovyanko, R. Rey-de-Castro, C. G. Elles, R. A. Crowell, and Y. Li, *Optimization of a femtosecond Ti:Sapphire amplifier using an acousto-optic programmable dispersive filter and a genetic algorithm*, Proceedings of SPIE, **6100**, 61000Q (2006)
5. L. Sheps, A. C. Crowther, C. G. Elles, and F. F. Crim, *Recombination dynamics and hydrogen abstraction reactions of chlorine radicals in solution*, Journal of Physical Chemistry A, **109**, 4296 (2005).
4. C. G. Elles, M. J. Cox, G. L. Barnes, and F. F. Crim, *Recombination and reaction dynamics following photodissociation of CH₃OCl in solution*, Journal of Physical Chemistry A, **108**, 10973 (2004).
3. C. G. Elles, M. J. Cox, and F. F. Crim, *Vibrational relaxation of CH₃I in the gas phase and in solution*, Journal of Chemical Physics, **120**, 6973 (2004).
2. C. G. Elles, D. Bingemann, M. M. Heckscher, and F. F. Crim, *Vibrational relaxation of CH₂I₂ in solution: Excitation level dependence*, Journal of Chemical Physics, **118**, 5587 (2003).
1. C. G. Elles and N. E. Levinger, *Reverse micelles solubilizing DMSO and DMSO/water mixtures*, Chemical Physics Letters, **317**, 624 (2000).

Recent and Forthcoming Oral Presentations:

“Laser excitation studies of the ionization mechanism in liquid water.” *Gordon Research Conference on Radiation Chemistry*, July 2006, Waterville, Maine. (Invited.)

“Two-photon ionization of liquid water from 8.3 to 12.4 eV.” *231st National Meeting of the American Chemical Society*, March 2006, Atlanta, Georgia.

“The mechanisms of photoionization and electron relaxation in liquid water.” *International Chemical Congress of Pacific Basin Societies (Pacifichem)*, December 2005, Honolulu, Hawaii.

“Ionization of liquid water: Dynamics of the solvated electron.” April 2005, Department of Chemistry, Ripon College, Wisconsin. (Invited.)

“Solvent influence on the vibrational relaxation of CH₃I.” *7th Symposium on Molecular Reaction Dynamics in Condensed Matter*, March 2004, Laguna Beach, California.

Poster Presentations:

“Photodissociation of methyl hypochlorite and vibrational relaxation of cis-stilbene in solution.” *Gordon Research Conference on Vibrational Spectroscopy*, July 2004, Bristol, Rhode Island.

“Vibrational relaxation of CH₃I in the gas phase and in solution.” *Gordon Research Conference on the Chemistry and Physics of Liquids*, August 2003, Plymouth, New Hampshire.

“Vibrational relaxation of CH₂I₂ in solution: Energy level dependence.” *Gordon Research Conference on Vibrational Spectroscopy*, July 2002, Newport, Rhode Island.

“Reverse micelles containing a water-DMSO mixture.” *Undergraduate Research and Creativity Symposium*, April 1999, Colorado State University, Fort Collins, Colorado.